

## Assessment Schedule – 2019

### Agricultural and Horticultural Science: Demonstrate understanding of how market forces affect supply of and demand for New Zealand primary products (91530)

#### Assessment Criteria

Achievement	Achievement with Merit	Achievement with Excellence
<i>Demonstrate understanding</i> involves <b>explaining</b> how market forces affect supply and demand for New Zealand primary products.	<i>Demonstrate in-depth understanding</i> involves <b>explaining in detail</b> how market forces affect supply and demand for New Zealand primary products, with quantitative data.	<i>Demonstrate comprehensive understanding</i> involves <b>analysing</b> how market forces affect supply and demand for New Zealand primary products, with a focus on the significance and impact of the market forces.

N1	N2	A3	A4	M5	M6	E7	E8
<b>Partially explains</b> ONE market force.	<b>Partially explains</b> TWO market forces.	<b>Explains</b> TWO market forces in general terms (one market force weak).	<b>Explains</b> TWO market forces in general terms.	<b>Explains in detail</b> ONE market force (using qualitative and / or quantitative material where appropriate)  <i>AND</i> <b>explains</b> ONE market force in general terms.	<b>Explains in detail</b> TWO market forces (using qualitative and / or quantitative material where appropriate).	<b>Explains in detail</b> TWO market forces (using qualitative and / or quantitative material where appropriate)  <i>AND</i> <b>fully discusses</b> the impact and significance of political intervention relating to demand <b>or</b> supply (and partially discusses the other) for one selected primary product.	<b>Explains in detail</b> TWO market forces (using qualitative and / or quantitative material where appropriate)  <i>AND</i> <b>fully discusses</b> the impact and significance of political intervention relating to demand <b>AND</b> supply for ONE selected primary product.
<b>N0</b> = No response; no relevant evidence.							

**Evidence**

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<b>Part A</b>	<p><b>Market forces affecting supply</b></p> <p><b>Explains in detail</b> how ONE market force from the list affected the <b>supply</b> of one primary product (Product 1).</p> <p>The supply is likely to be represented by a change in quantity, timing or attributes of the primary product.</p> <p><i>Exchange rate</i></p> <ul style="list-style-type: none"> <li>Exchange rates impact on the price of goods overseas, and vice versa.</li> <li>High NZD affecting export revenue where NZD reached record highs, e.g. in 2014 when the NZD reached between 83 and 84 cents to the USD. This decreased the amount of revenue New Zealand exporters gained from each foreign dollar. Comparable to 2019 when the NZD was around 70 cents to the USD. In 2014, we would only gain around NZ\$119 million for every \$US100 million of exports. In 2017, every \$US100 million of exports New Zealand would gain NZ\$145 million just from a change in the dollar.</li> <li>A decrease in the NZD of just 3 cents, e.g. from USD 0.69 to 0.65, equates to the farmer receiving ~\$8 more at the gate per lamb, or \$108 per bull. Because producers get more money at the gate if the NZD weakens, producers are encouraged to increase production and/or invest in improved production techniques.</li> <li>For New Zealand growers, a strengthening dollar makes imports cheaper, and so machinery and other inputs can be bought at cheaper rates during these times.</li> </ul> <p><i>Weather events</i></p> <ul style="list-style-type: none"> <li>Beef and Lamb: Droughts reduce the growth of grass, so farmers run short of feed and need to sell animals (either to the works, or to other farmers). This results in large quantities of animals being slaughtered early, followed by a shortage of animals later in the season.</li> <li>Wine: Rain near grape harvest time impacts on the ability for good wine to be made. If it is cloudy and overcast, the grapes will have a harder time ripening. They need sunlight. If it rains, the grapes will take on more water, which means the flavours become dilute and the sugar/acid balance that winemakers are looking for gets out of whack. With too much rain, the grape berries start to swell and even split. Grape growers then worry about spoilage, mould and mildew. Rain is also a concern in spring. Grapes are formed from flowers, and a heavy rain can knock the blooms off the plant and reduce the size of the crop. Damp conditions can also lead to mildew and other diseases.</li> </ul>																																																																								
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**Part B Market forces affecting demand**

**Explains in detail** how one market force from the list affected the **demand** for one primary product (Product 2).

The demand is likely to be represented by a change in quantity or the prices paid for the primary product.

*Consumer preferences*

KIWIFRUIT:

- The Asian market prefers sweeter and smaller kiwifruit. Kiwifruit Gold meets this preference, and so demand is increasing for this product in these markets.
- Taste of kiwifruit is more linked to dry matter than the sugar (brix) measurement. Growers are encouraged to alter production techniques in order to increase the dry matter of kiwifruit. Higher levels in dry matter result in a better eating experience and an increase in demand.

LAMB:

- Butchers in the UK make cuts based on the weather on the day (steaks and chops on BBQ days, roast on colder days), they prefer primal cuts (lamb leg / forequarter).
- Consumers prefer New Zealand fresh lamb to UK fresh or NZ frozen lamb. Using strict meat handling techniques, NZ lamb is fresh chilled for 73 days to deliver to the UK. Higher prices are paid to New Zealand producers.
- Halal-killed meat products are produced so that New Zealand meat is suitable for Muslims (approx. 5% of UK market), without needing further differentiation. This results in increased volumes being demanded as more potential consumers' needs are catered for.

*Promotion*

VENISON:

- Consumer tasting opportunities as well as providing recipes and cooking tips in Germany resulted in a 7% increase in consumer demand.

KIWIFRUIT:

- Zespri has used tastings in supermarkets to increase the demand for their kiwifruit varieties out in the marketplace. These promotions are usually carried out when Zespri kiwifruit are arriving at a market, as a way of creating consumer excitement. Zespri spends \$150 million a year on marketing and promotion, which continues to grow annually as Zespri continues to push its brand into new markets and cement its position in established markets.
- Zespri has invested \$100 million into digital sales and e-commerce. As more consumers are expected to purchase their food in this way, Zespri sees this as an area for further development. In China, 10% of Zespri kiwifruit purchases were made using e-commerce.

*Market trends*

- Food safety is a factor in consumers' purchasing decisions. The New Zealand dairy industry has a reputation of having high standards of food safety in the production, processing and storage of dairy products. Consumers are willing to pay more for products produced with high standards. Our dairy products receive high returns, more than many of our competitors due to the consumers being willing to pay more for our products. Infant milk formula from New Zealand is another example of a product receiving higher prices than competitors' products.
- The apple industry in New Zealand has been working to produce apples with low chemical residues to satisfy consumers overseas who have concerns about chemicals in the food they eat. As New Zealand growers have been able to produce fruit with extremely low MRLs (maximum residue limits), they have been receiving premium prices in overseas markets, far more than competitors' products. The volume of fruit demanded also continues to increase.
- Consumers are more interested than ever to know where the food they are eating, or where the clothes they are wearing, comes from and how it was produced. Icebreaker was one of the companies to pioneer the traceability of the end product back to its origin. Consumers were able to trace their base layer clothing back to the farm the wool came from, and that gave them a connection with how their product was produced. People are prepared to part with more money for a product, or it may increase their desire to have it, if they have this deep connection with how it's produced.

<b>Part C</b>	<p><b>Market forces affecting supply and demand</b></p> <p><b>Discusses</b> how political intervention affects the supply of and demand for one selected primary product (Product 1 or 2).                  The supply is likely to be represented by a change in quantity, timing or attributes of both the primary products. The demand is likely to be represented by a change in quantity, or the prices paid for both primary products.                  The significance of political intervention as a market force is <b>justified</b> in detail, and the impact that it has on the supply and demand for New Zealand primary products is clearly identified and discussed.                  The answer will be reasoned and supporting data included.                  Answers should be well prepared and laid out in a logical order.</p> <p><i>Political intervention</i></p> <ul style="list-style-type: none"> <li>• Foreign governments use protectionist measures to support their domestic producers from primary products produced in New Zealand. Their domestic producers may be smaller than producers in New Zealand, they may have less yields per hectare, or the foreign government may just want to ensure they are supported by their citizens in political elections.</li> <li>• Tariffs being charged on our primary products entering their markets, making our products more expensive for their consumers. This keeps the demand low for our primary products, keeping our volumes supplied low.</li> <li>• Non-tariff barriers, such as foreign countries having low pest tolerances, make it harder for us to produce to an acceptable standard. This causes less supply into their market due to the standards being hard to meet, or it may mean costs of production are increased to produce an acceptable standard, which ensures our products are more expensive in market and keeps demand low.</li> <li>• Trade deals being signed between us and a trading partner, such as China, resulting in the reduction of tariffs. This makes our products less expensive in market, which then causes an increase in demand, which is followed by an increase in volumes of primary products supplied from New Zealand.</li> <li>• Political instability between large countries, such as China and USA, can cause some nervousness for producers in New Zealand, as we rely on open and free trade. We don't want borders to be closed or tariffs to be added to traded products.</li> <li>• Brexit will affect us, as we may lose flexibility around where we supply our products in these two 'new' markets that used to be one market.</li> </ul> <p><i>Significance of market forces</i></p> <ul style="list-style-type: none"> <li>• Political intervention could be compared against other market forces for products in terms of supply and demand.</li> <li>• The significance of the market force is stated and then justified as to why it is more significant than other market forces.</li> </ul>
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**Cut Scores**

Not Achieved	Achievement	Achievement with Merit	Achievement with Excellence
0 – 2	3 – 4	5 – 6	7 – 8